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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,178	12/17/1999	ANDREW PETER BRADLEY	169.1523	9858

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EXAMINER

KIBLER, VIRGINIA M

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 01/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/466,178

Applicant(s)

BRADLEY ET AL.

Examiner

Virginia M Kibler

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/24/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9-11,14-16,19-21 and 24 is/are rejected.
- 7) ☒ Claim(s) 3,4,8,12,13,17,18,22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/17/99 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Election

1. Claims 25-104 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 7.

Note, remarks indicate that claims 25-104 have been canceled. However, the amendment is missing instructions to cancel claims 25-104.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 5-7, 9-11, 14-16, 19-21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Tai (5,054,100).

Regarding claim 1, Tai discloses a method of interpolating a first set 22 of discrete sample values to generate a second set 32 of discrete sample values using one of a plurality of interpolation kernels, characterized in that the interpolation kernel is selected depending on edge information for each discrete sample value of the first set (Abstract). Tai discloses selecting the

interpolation kernel depending on edge strength and edge direction (Col. 5, lines 56-59) as well as edge context (Col. 6, lines 4-11).

Regarding claim 2, Tai discloses using a universal interpolation kernel (Col. 5, lines 33-45).

Regarding claim 5, Tai discloses a method wherein the first set of discrete sample values are at a different resolution from the second set of discrete sample values (Abstract, lines 1-3).

Regarding claim 6, the arguments analogous to those presented above for claim 1 are applicable to claim 6.

Regarding claim 7, the arguments analogous to those presented above for claim 2 are applicable to claim 7.

Regarding claim 9, the arguments analogous to those presented above for claim 5 are applicable to claim 9.

Regarding claim 10, the arguments analogous to those presented above for claim 1 are applicable to claim 10. Tai discloses accessing a first set of discrete sample values of the image data 22, calculating kernel values for each of the discrete sample values using one of a plurality of kernels depending upon an edge orientation indicator, an edge strength indicator, and an edge context indicator for each of the discrete sample values 30, and convolving 24 the kernel values with the discrete sample values to provide a second set of discrete sample values 32.

Regarding claim 11, the arguments analogous to those presented above for claim 2 are applicable to claim 11.

Regarding claim 14, the arguments analogous to those presented above for claim 5 are applicable to claim 14.

Regarding claim 15, the arguments analogous to those presented above for claim 10 are applicable to claim 15. Note that Tai discloses a method and apparatus (Abstract).

Regarding claim 16, the arguments analogous to those presented above for claim 2 are applicable to claim 16.

Regarding claim 19, the arguments analogous to those presented above for claim 5 are applicable to claim 19.

Regarding claim 20, the arguments analogous to those presented above for claim 10 are applicable to claim 20. Note that Tai discloses a software algorithm (Col. 3, lines 19-21).

Regarding claim 21, the arguments analogous to those presented above for claim 2 are applicable to claim 21.

Regarding claim 24, the arguments analogous to those presented above for claim 5 are applicable to claim 24.

Allowable Subject Matter

4. Claims 3, 4, 8, 12, 13, 17, 18, 22, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 5,131,057 to Walowitt et al. for method for video-to-printing image resolution conversion;

U.S. Pat. No. 5,903,676 to Wu et al. for context-based, adaptive, lossless image codec;

U.S. Pat. No. 6,408,109 to Silver et al. for detecting and sub-pixel location of edges in a digital image; and

U.S. Pat No. 5,740,284 to Wover et al. for resampling and filtering images using discrete cosine transforms.


Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia M Kibler whose telephone number is (703) 306-4072. The examiner can normally be reached on Mon. - Thurs. 8:00 - 5:30 and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

VK
January 12, 2003


AMELIA M. AU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600